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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,683	02/01/2002	Randolph D. Schueller	ALTEP053	3103
25920	7590	09/23/2004	EXAMINER	
MARTINE & PENILLA, LLP 710 LAKEWAY DRIVE SUITE 170 SUNNYVALE, CA 94085			ROY, SIKHA	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/683,683	SCHUELLER ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Sikha Roy	2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 August 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4, 6 and 9-16 is/are rejected.
- 7) Claim(s) 5, 7 and 8 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

The Amendment, filed on August 3, 2004 has been entered and is acknowledged by the Examiner.

### ***Specification***

The abstract of the disclosure is objected to because of the informality.

In abstract disclosure line 3, 'an electron gun, such as an electron gun' should be replaced with --such as an electron gun--.

Correction is required.

The disclosure is objected to because of the following informalities:

Page 4 [0024] line 4 'support cap 10' should be replaced with --support cap 14--.

Page 6 [0030] line 1 'a cover guide' should be replaced with --a cap--.

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,6 and 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,323,813 to Vieland et al.

Regarding claim 1 Vieland discloses (Figs. 1 and 2) an apparatus with a cap 22 including an aperture and configured to allow an electron to pass through, a cover

assembly 42 including a cover adjacent to the aperture configured to lie along electron path during at least one point in time. Regarding the limitation comprising cover being 'moveable and configured to move in a plane substantially orthogonal to the path followed by the electron' the examiner notes that this moveable configuration of the cover is part of intermediate product and does not constitute a limitation in the final product. The specification discloses (page 6 section [0028]) that upon release of the spring the cover is displaced such that the apertures are exposed and this configuration of cover with open apertures forms the final product.

Regarding claim 2 Vieland discloses (Figs. 1 and 2) the cover assembly further comprises means for displacing the cover (springs 60).

Regarding claim 3 Vieland discloses the cover assembly comprising spring 60.

Regarding claim 6 Vieland discloses the cover assembly further comprises a material comprising an end 50 wherein the end is fastened to the spring 60.

Regarding claim 9 Vieland discloses the cover assembly further comprising a cover guide 12 in contact with the cover.

Regarding claim 10 Vieland discloses (column 6 lines 30-34) the cover comprising stainless steel.

Regarding claim 11 Vieland discloses the cover comprising an insulator 56.

Regarding claim 12 Vieland discloses (Figs.1 and 2) an electron gun comprising a cap assembly with cap 22, cap aperture, cover 42 and spring 60 wherein the cover overlies the cap aperture during one point in time and the spring comprises a first end attached to the cover and a second end attached to the cap and a focus electrode 20

spaced apart and insulated from the cap assembly and comprising a focus aperture in alignment with the cap aperture. The limitation comprising 'spring configured to move the cover in a plane substantially orthogonal to an electron path defined through the cap aperture' is a part of intermediate product and does not constitute a limitation for final product of the apparatus.

Regarding claim 13 Vieland discloses (column 6 lines 30-34) the cap assembly (plate 50O comprising stainless steel).

Claims 14, 15 and 16 essentially recite the same limitations of claims 10,11 and 9 respectively and hence are rejected for the same reasons (see rejections of claims 10,11 and 9).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,323,813 to Vieland et al. as applied to claim 1 above, and further in view of U.S. Patent 5,075588 to Hunter.

Regarding claim 4 Vieland fails to disclose the spring being made of stainless steel.

Hunter discloses (column 6 lines 4-13) the spring made of stainless steel in order to withstand operating high temperature. Hunter further discloses the spring made of stainless steel is resilient and deformable without permanently retaining its deformed shape.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have the spring of the apparatus of Vieland made of stainless steel as suggested by Hunter for the benefit of withstanding operating high temperature and resiliency and deformability without permanently retaining the deformed shape.

#### ***Allowable Subject Matter***

Claims 5, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5 the prior art of record neither teaches nor suggests an apparatus having all the limitations as claimed in claim 5 and particularly comprising means for releasing the spring in the cover assembly.

Regarding claim 7 the prior art of record U.S. Patent 4,340,841 to Schupp discloses shunt material which provides fuse when sufficient amount of electrical current is passed through. But the reference fails to teach or render obvious to use the material

at one end of the spring configured to release the spring connected with the cover when sufficient amount of electrical current is passed through as claimed.

Regarding claim 8 the prior art of record neither teaches nor suggests an apparatus having all the limitations as claimed in claim 8 and particularly comprising the cover assembly comprising an actuator.

### ***Response to Arguments***

Applicant's arguments filed August 3,2004 have been fully considered but they are not persuasive.

In response to applicant's argument Vieland fails to disclose the feature of cover being moveable in a plane substantially orthogonal to the path followed by electron the examiner respectfully submits that this moveable configuration of the cover is part of intermediate product and does not constitute a limitation in the final product. The cover is moved (when the spring is released) at one point in time and in the final product of the apparatus the cover does not move and the apertures on the cover aligned with the holes in the cap stay open for the electrons to pass through.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sikha Roy  
Patent Examiner  
Art Unit 2879

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